10/533,377

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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JUL 02	LMEDLINE coverage updated
NEWS 3	JUL 02	SCISEARCH enhanced with complete author names
NEWS 4	JUL 02	CHEMCATS accession numbers revised
NEWS 5	JUL 02	CA/CAplus enhanced with utility model patents from China
NEWS 6	JUL 16	CAplus enhanced with French and German abstracts
NEWS 7	JUL 18	CA/CAplus patent coverage enhanced
NEWS 8	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9	JUL 30	USGENE now available on STN
NEWS 10	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 11	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 12	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 13	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 14	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 15	AUG 27	USPATOLD now available on STN
NEWS 16	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 17	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 18	SEP 13	FORIS renamed to SOFIS
NEWS 19	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 20	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 21	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 22	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 24	OCT 19	BEILSTEIN updated with new compounds

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

```
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                                                  ENTRY    SESSION
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DICTIONARY FILE UPDATES:   9 NOV 2007  HIGHEST RN 952797-35-2

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Uploading C:\Program Files\Stnexp\Queries\10533377.str
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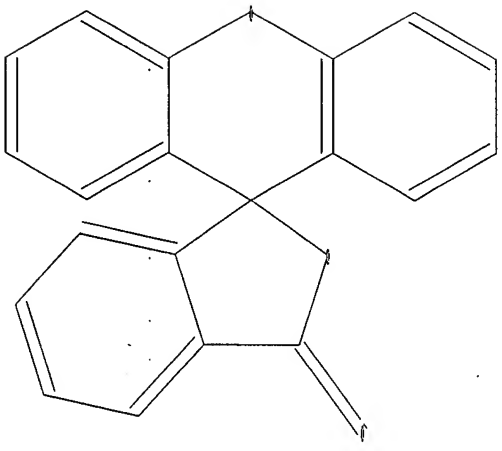

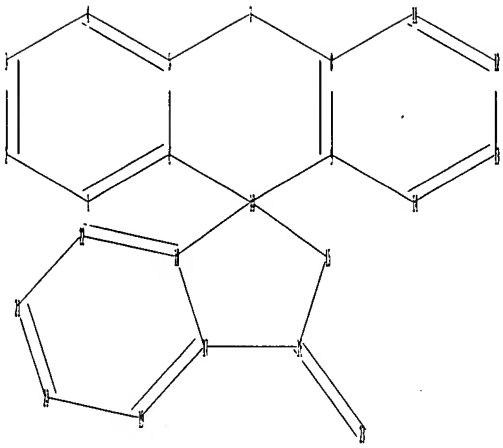

chain nodes :
23
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
22
chain bonds :
16-23
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 10-15
10-18 11-12 12-13 13-14 15-16 16-17 17-18 17-19 18-22 19-20 20-21
21-22
exact/norm bonds :
16-23
exact bonds :
5-7 6-10 7-8 9-10 10-15 10-18 15-16 16-17
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-11 9-14 11-12 12-13 13-14 17-18
17-19 18-22 19-20 20-21 21-22
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:CLASS

L1 STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 21:21:34 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 833 TO ITERATE

100.0% PROCESSED 833 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 14929 TO 18391
PROJECTED ANSWERS: 13282 TO 16558

L2 50 SEA SSS SAM L1

=> s l1 ful
FULL SEARCH INITIATED 21:21:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 16121 TO ITERATE

100.0% PROCESSED 16121 ITERATIONS 14354 ANSWERS
SEARCH TIME: 00.00.01

L3 14354 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 172.10 172.31

FILE 'CAPLUS' ENTERED AT 21:21:46 ON 10 NOV 2007
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FILE COVERS 1907 - 10 Nov 2007 VOL 147 ISS 21
FILE LAST UPDATED: 9 Nov 2007 (20071109/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l3
L4 33637 L3

```
=> s l4 and (prepar? or method or make or making or synthes? or process)
       1828766 PREPAR?
        133837 PREP
          2315 PREPS
        135936 PREP
                 (PREP OR PREPS)
       2125686 PREPD
             3 PREPDS
       2125688 PREPD
                 (PREPD OR PREPDS)
        146675 PREPG
             9 PREPGS
        146683 PREPG
                 (PREPG OR PREPGS)
       2858263 PREPN
        211266 PREPNS
       3017389 PREPN
                 (PREPN OR PREPNS)
       5074260 PREPAR?
                 (PREPAR? OR PREP OR PREPD OR PREPG OR PREPN)
       3548243 METHOD
       1418435 METHODS
       4566798 METHOD
                 (METHOD OR METHODS)
        273407 MAKE
        212582 MAKES
        470609 MAKE
                 (MAKE OR MAKES)
        329221 MAKING
            35 MAKINGS
        329250 MAKING
                 (MAKING OR MAKINGS)
       1670374 SYNTHES?
       2518307 PROCESS
       1716032 PROCESSES
       3755651 PROCESS
                 (PROCESS OR PROCESSES)
L5       18833 L4 AND (PREPAR? OR METHOD OR MAKE OR MAKING OR SYNTHES? OR
PROCE
                 SS)

=> s l5 and esther
             71 ESTHER
             11 ESTHERS
             82 ESTHER
                 (ESTHER OR ESTHERS)
L6            0 L5 AND ESTHER

=> s l5 and ester
         610455 ESTER
         448187 ESTERS
```

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        846715 ESTER
                  (ESTER OR ESTERS)
L7        1496 L5 AND ESTER

=> s l5 and acid ester
       4474144 ACID
       1600200 ACIDS
       4978785 ACID
                  (ACID OR ACIDS)
        610455 ESTER
        448187 ESTERS
        846715 ESTER
                  (ESTER OR ESTERS)
        149136 ACID ESTER
                  (ACID(W)ESTER)
L8         208 L5 AND ACID ESTER

=> s l8 and (phthalein or phthalacein or fluorescein)
           877 PHTHALEIN
           357 PHTHALEINS
          1091 PHTHALEIN
                  (PHTHALEIN OR PHTHALEINS)
             0 PHTHALACEIN
         27568 FLUORESCEIN
           259 FLUORESCEINS
         27645 FLUORESCEIN
                  (FLUORESCEIN OR FLUORESCEINS)
L9          49 L8 AND (PHTHALEIN OR PHTHALACEIN OR FLUORESCEIN)


L
L9   ANSWER 24 OF 49  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1992:241720  CAPLUS
DOCUMENT NUMBER:          116:241720
TITLE:                    Product for improved permanent waving of hair and
                          simultaneously coloring and permanently waving hair
INVENTOR(S):              Schultz, Thomas M.; Patel, Jitendra; Wong,
Stephanie
PATENT ASSIGNEE(S):       Shiseido Co., Ltd., Japan
SOURCE:                   U.S., 6 pp.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     US 5094662            A     19920310    US 1990-612227           19901113
     US 5188639            A     19930223    US 1992-847788           19920306
PRIORITY APPLN. INFO.:                       US 1990-612227       A3  19901113
```
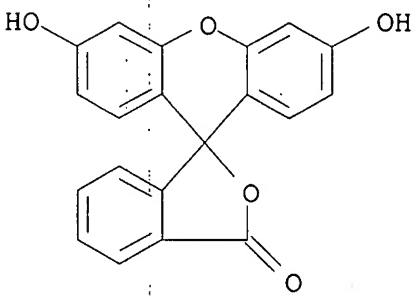

AB By combining of a fluorescein-based dye with a mercaptan-based permanent waving composition and maintaining the pH of the resulting composition between .apprx.2.5-4.5, a composition is achieved which simultaneously colors and permanently waves the hair. In addition, even if no coloring or dyeing of the hair is desired, the use of a colorless or complimentary fluorescein-based dye with the mercaptan-based permanent waving composition achieves a composition which imparts a substantially improved curl configuration to the hair as well as substantially longer lasting curls. Preferably, the mercaptan-based permanent waving composition employed comprises an ester of either thioglycolic acid, thiolactic acid, or the amide of 2-aminoethanethiol. Hair treated with 1 part 32.5% glycerin monothioglycolate in glycerin; 1 part 1.50% NH4Cl in deionized water, 0.005 part D & C Red Number 28 5.0% in deionized water, and preservative q.s.; pH 3.2, had improved curl retention and structural integrity. Hair color was dark auburn.

IT 2321-07-5D, Fluorescein, derivs. 15086-94-9
17372-87-1, D&C Red Number 22 18472-87-2
RL: BIOL (Biological study)
(permanent wave and hair dye preparation containing)

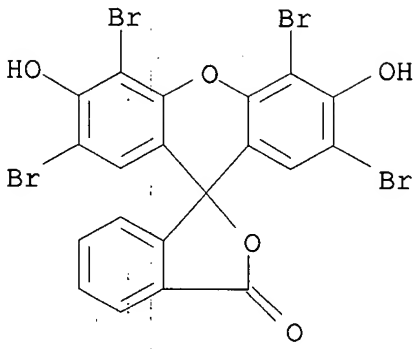
RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)



RN 15086-94-9 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy- (CA INDEX NAME)



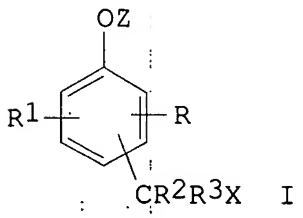
RN 17372-87-1 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, sodium salt (1:2) (CA INDEX NAME)

L9 ANSWER 27 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:511969 CAPLUS
DOCUMENT NUMBER: 113:111969
TITLE: Enzyme-controlled-release system using a quinone-methide elimination reaction mechanism for use in immunoassays and pharmaceuticals
INVENTOR(S): Meneghini, Frank A.; Palumbo, Paul S.
PATENT ASSIGNEE(S): Polaroid Corp., USA
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9001558	A1	19900222	WO 1989-US1696	19890420
W: JP				
RW: DE, FR, GB, IT, NL				
US 5112739	A	19920512	US 1988-227141	19880802
EP 396642	A1	19901114	EP 1989-907960	19890420
EP 396642	B1	19940511		
R: DE, FR, GB, IT, NL				
JP 03500367	T	19910131	JP 1989-507309	19890420
CA 1336586	C	19950808	CA 1989-598563	19890503

PRIORITY APPLN. INFO.: US 1988-227141 A 19880802
WO 1989-US1696 W 19890420

OTHER SOURCE(S): MARPAT 113:111969
GI

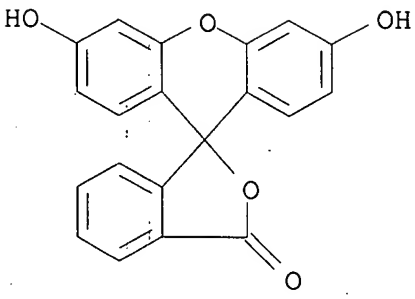


I

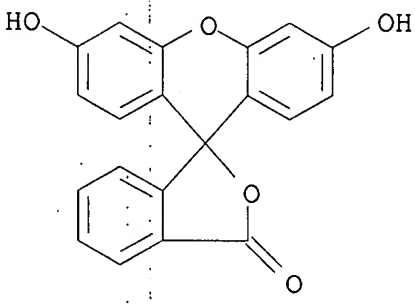
AB An enzyme-controlled-release system uses compound I (R, R1, R2, R3 = H, substituent affecting the mobility or reactivity of the compound, or a substituent including a biol. active group; X = leaving group and may be an organic, organometallic, or inorg. moiety; Z = enzyme substrate cleavable by an active enzyme; CR2R3X is either ortho or para to the OZ moiety). An active enzyme cleaves the substrate, Z; the resultant active intermediate undergoes a quinone-methide elimination reaction to release the leaving group X. The system is useful for detecting an analyte of interest and may be used in, e.g., immunoassays, enzyme amplification systems, and the release of pharmacol. active ligands. (4-Resorufinylmethyl-2-nitrophenyl)-2,3,4,6-tetra-O-acetyl-β-D-galactopyranoside was prepared by heating a solution of (4-chloromethyl-2-nitrophenyl)-2,3,4,6-tetra-O-acetyl-β-D-galactopyranoside (preparation given), Na resorufin, and a catalytic amount of NaI in dry DMF at 70° for 4 h. The galactosyl acetate protecting groups were removed with NaOMe. When the galactopyranoside was treated with β-galactosidase, the leaving group release rate was 0.25 (compared with 1.0 for o-nitrophenolgalactoside).

IT 2321-07-5, Fluorescein 2321-07-5D, Fluorescein, derivs. 3086-44-0D, Rhodol, derivs.
RL: ANST (Analytical study)
(enzyme-controlled-release compound containing, quinone-methide elimination in, for immunochem. anal.)

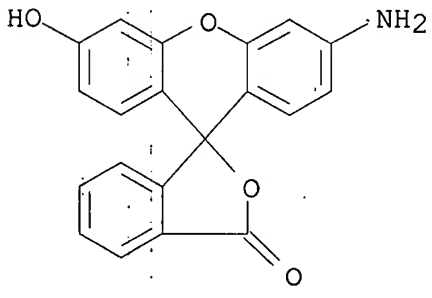
RN 2321-07-5 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)



RN 2321-07-5 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)



RN 3086-44-0 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3'-amino-6'-hydroxy- (CA
INDEX NAME)



L9 ANSWER 28 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:570653 CAPLUS
DOCUMENT NUMBER: 111:170653
TITLE: Novel amphiphilic nucleic acid conjugates with more efficient membrane transport, their preparation and use

INVENTOR(S): Tullis, Richard H.
PATENT ASSIGNEE(S): Synthetic Genetics, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8809810	A1	19881215	WO 1988-US2009	19880611
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4904582	A	19900227	US 1987-61874	19870611
EP 321548	A1	19890628	EP 1988-906384	19880611
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 03500530	T	19910207	JP 1988-505633	19880611

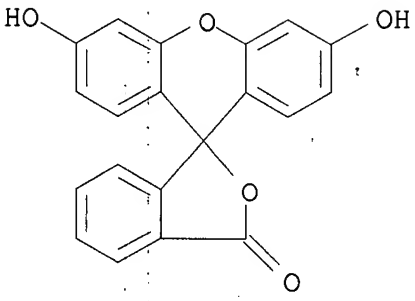
PRIORITY APPLN. INFO.: US 1987-61874 A 19870611
WO 1988-US2009 W 19880611

AB Novel nucleic acid conjugates are prepared comprising a relatively short nucleic acid sequence complementary to a sequence of interest for modifying intracellular expression, a linking group, and a group imparting amphiphilic character, usually more hydrophobic than hydrophilic. The resulting conjugates are more efficient in membrane transport and can cross the membrane and effectively modulate the transcriptional system. Oligonucleotides 20 bases long (synthesized antisense to mouse β-globin mRNA) were conjugated at the 5'-terminal to PEG using imidazole-activated carboxylic acid esters and bis-aminoalkyl PEG. At 15 μM the conjugate selectively inhibited Hb synthesis in cultured Friend murine erythroleukemia cells by 95% compared to 0%, 24%,, and 78% inhibition with DMSO, PEG, and PEG + the oligonucleotide, resp., at 100 μM.

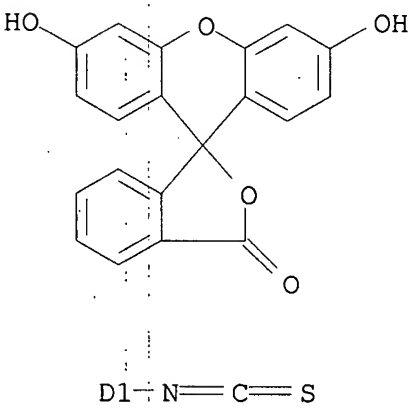
IT 2321-07-5D, Fluorescein, oligonucleotide conjugates
RL: ANST (Analytical study)
(mRNA maturation or translation inhibition by)

RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)



IT 27072-45-3, FITC
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with diamine and oligonucleotide)
RN 27072-45-3 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-5(or 6)-isothiocyanato- (CA INDEX NAME)



D1—N=C=S

L9 ANSWER 29 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:551435 CAPLUS
DOCUMENT NUMBER: 109:151435
TITLE: The characterization of metal-containing polymeric dyes for control of polymer degradation
AUTHOR(S): Carraher, Charles E., Jr.; Linville, Raymond J.; Stevison, Donald F.; Foster, Van R.; Williams, Melanie; Aloi, Mary Jo
CORPORATE SOURCE: Dep. Chem., Florida Atlantic Univ., Boca Raton, FL, 33431, USA
SOURCE: Polymeric Materials Science and Engineering (1988), 58, 85-9
CODEN: PMSEDG; ISSN: 0743-0515
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title dyes were prepared by copolymg. R2SnCl2 (R = Me, Et, Bu,

Ph, cyclohexyl) with eosin Y, mercurochrome, phloxine B, eosin B, fluorescein, or Rose Bengal and tested for inhibition of A. niger in acrylic latex pastes. Polymeric dyes prepared from biscyclopentadienyltitanium dichloride were also discussed.

IT 89761-57-9 116828-87-6 116828-90-1
116828-91-2 116852-57-4 116852-58-5
RL: USES (Uses)
(bactericidal properties of colored)

RN 89761-57-9 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-4,5,6,7-tetrachloro-3',6'-dihydroxy-, disodium salt, polymer with dichlorodiphenylstannane (9CI) (CA INDEX NAME)

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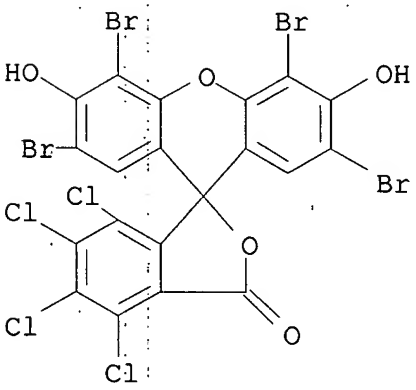
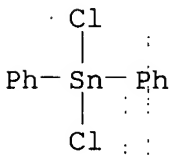
CRN 18472-87-2
CMF C20 H4 Br4 Cl4 O5 . 2 Na



●2 Na

CM 2

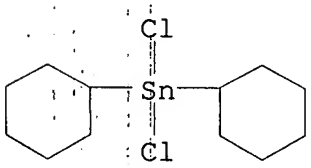
CRN 1135-99-5
CMF C12 H10 Cl2 Sn



RN 116828-87-6 CAPLUS
CN Mercury,
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dichlorodicyclohexylstannane (9CI) (CA INDEX NAME)

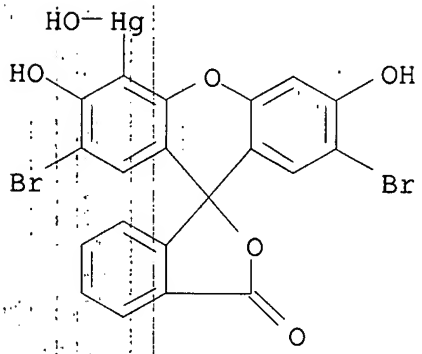
CM 1

CRN 3342-69-6
CMF C12 H22 Cl2 Sn



CM 2

CRN 129-16-8
CMF C20 H10 Br2 Hg O6 . 2 Na



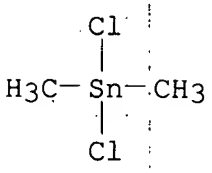
2 Na

RN 116828-90-1 CAPLUS
CN Mercury,
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dichlorodimethylstannane (9CI) (CA INDEX NAME)

CM 1

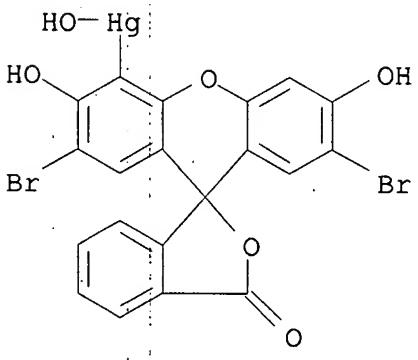
CRN 753-73-1

CMF C2 H6 Cl2 Sn



CM 2

CRN 129-16-8
CMF C20 H10 Br2 Hg O6 . 2 Na

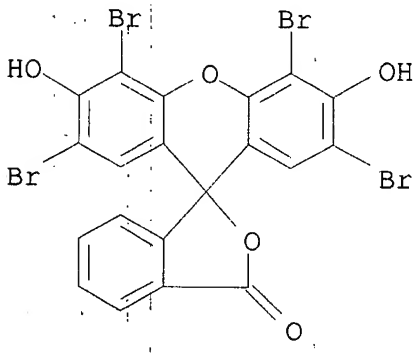


●2 Na

RN 116828-91-2 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, disodium salt, polymer with dichlorodimethylstannane (9CI) (CA INDEX NAME)

CM 1

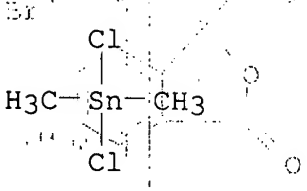
CRN 17372-87-1
CMF C20 H8 Br4 O5 . 2 Na



2 Na

CM 2

CRN 753-73-1
CMF C2 H6 Cl2 Sn

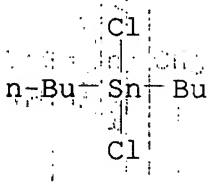


RN 116852-57-4 CAPLUS
CN Mercury,
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dibutyldichlorostannane (9CI) (CA INDEX NAME)

CM 2

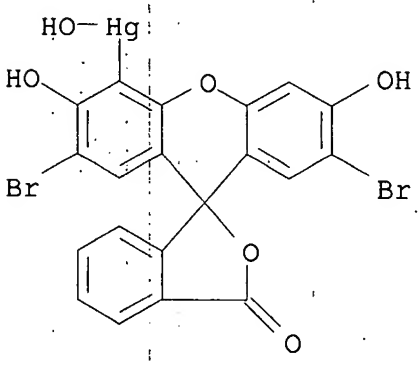
CM 1

CRN 683-18-1
CMF C8 H18 Cl2 Sn



CM 2

CRN 129-16-8
CMF C20 H10 Br2 Hg O6 . 2 Na

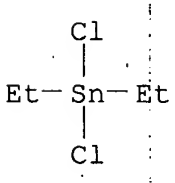


●2 Na

RN 116852-58-5 CAPLUS
CN Mercury,
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dichlorodiethylstannane (9CI) (CA INDEX NAME)

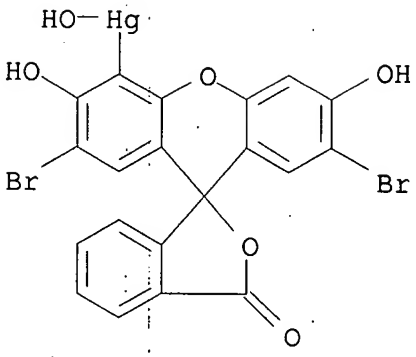
CM 1

CRN 866-55-7
CMF C4 H10 Cl2 Sn



CM 2

CRN 129-16-8
CMF C20 H10 Br2 Hg O6 . 2 Na

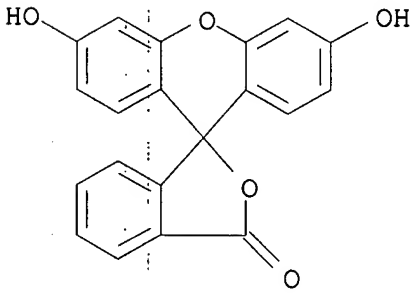


●2 Na

IT 89761-58-0 89777-76-4 116828-89-8
RL: USES (Uses)
(testing of colored, for bactericidal properties)
RN 89761-58-0 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-, polymer
with dichlorodiphenylstannane (9CI) (CA INDEX NAME)

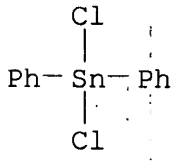
CM 1

CRN 2321-07-5
CMF C20 H12 O5



CM 2

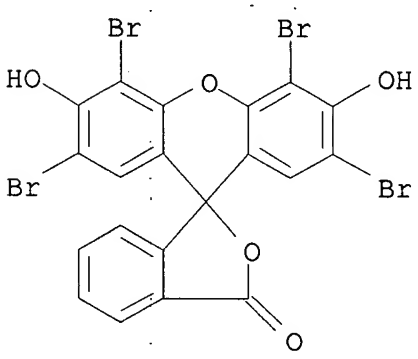
CRN 1135-99-5
CMF C12 H10 Cl2 Sn



RN 89777-76-4 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, disodium salt, polymer with dichlorodiphenylstannane (9CI) (CA INDEX NAME)

CM 1

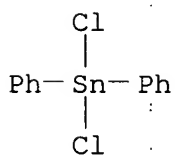
CRN 17372-87-1
CMF C20 H8 Br4 O5 . 2 Na



●2 Na

CM 2

CRN 1135-99-5
CMF C12 H10 Cl2 Sn

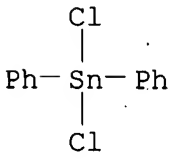


RN 116828-89-8 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 4',5'-dibromo-3',6'-dihydroxy-2',7'-dinitro-, disodium salt, polymer with dichlorodiphenylstannane (9CI) (CA INDEX NAME)

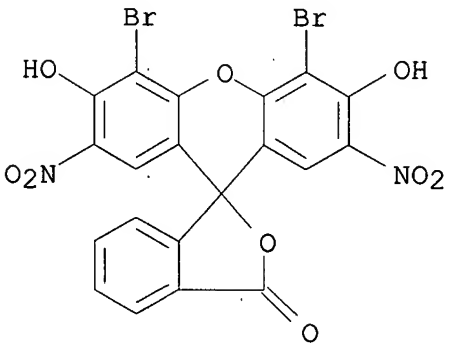
CM 1

CRN 1135-99-5
CMF C12 H10 Cl2 Sn



CM 2

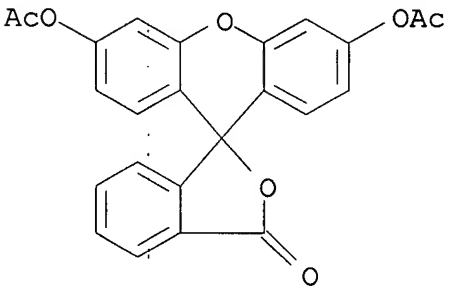
CRN 548-24-3
CMF C20 H8 Br2 N2 O9 . 2 Na



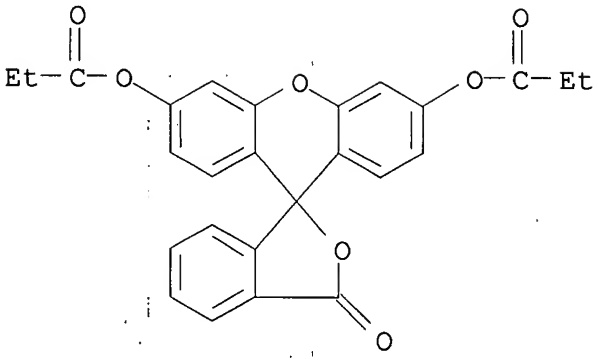
●2 Na

L9 ANSWER 33 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1972:444650 CAPLUS
DOCUMENT NUMBER: 77:44650
ORIGINAL REFERENCE NO.: 77:7391a,7394a
TITLE: Hydrolysis of phthalyl amino acid esters of fluorescein in the presence of leucine aminopeptidase
AUTHOR(S): Thomas, John J.; Eveland, Warren C.; Medzon, Edward L.; Christian, Walter; Wylie, Dwayne E.; Burckhalter,

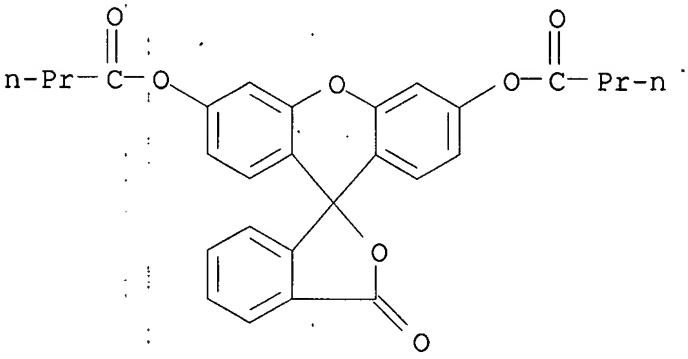
Joseph; Jones, Ronald H.
CORPORATE SOURCE: Dep. Med. Chem., Univ. Michigan, Ann Arbor, MI, USA
SOURCE: Proceedings of the Society for Experimental Biology and Medicine (1972), 140(1), 179-82
CODEN: PSEBAA; ISSN: 0037-9727
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Phthalyl amino acid esters of fluorescein were synthesized and characterized. They were tested (in vitro) for use as possible fluorogenic substrates for leucine aminopeptidase (LAP). The rates of enzymic hydrolysis of these compds. were compared with those of some com. available fluorescein esters. The phthalyl amino acid esters were hydrolyzed rapidly by LAP, lipase, and chymotrypsin and much more slowly by trypsin and cholinesterases. The min. detectable LAP concentration was 1 μg/ml for d, d-bis(α-isopropyl-1,3-dioxo- 2-isoindolinylacetyl) fluorescein (d,d-I) to 8 μg/ml for the l,l-bis(α-isobutyl-1,3-dioxo- 2-isoindolinylacetyl)-(l,l- II) and l,l-bis(α-butyl-1,3-dioxo-2-isoindolinylacetyl)fluorescein (l,l-III).
IT 596-09-8 7276-28-0 7298-65-9 7308-90-9 19722-86-2 36889-44-8 36889-45-9 36889-46-0 36889-47-1 36889-48-2 36905-09-6 36984-36-8
RL: BIOL (Biological study)
(hydrolysis by leucine aminopeptidase)
RN 596-09-8 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-bis(acetyloxy)- (CA INDEX NAME)



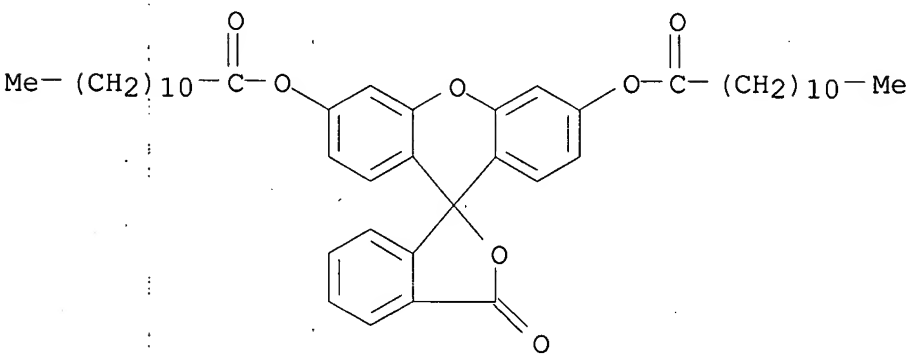
RN 7276-28-0 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-bis(1-oxopropoxy)- (CA INDEX NAME)



RN 7298-65-9 CAPLUS
CN Butanoic acid, 1,1'-(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl) ester (CA INDEX NAME)

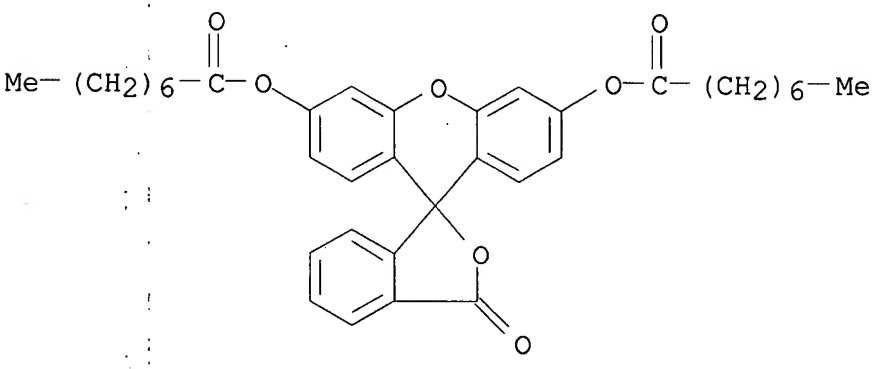


RN 7308-90-9 CAPLUS
CN Dodecanoic acid, 1,1'-(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl) ester (CA INDEX NAME)



RN 19722-86-2 CAPLUS

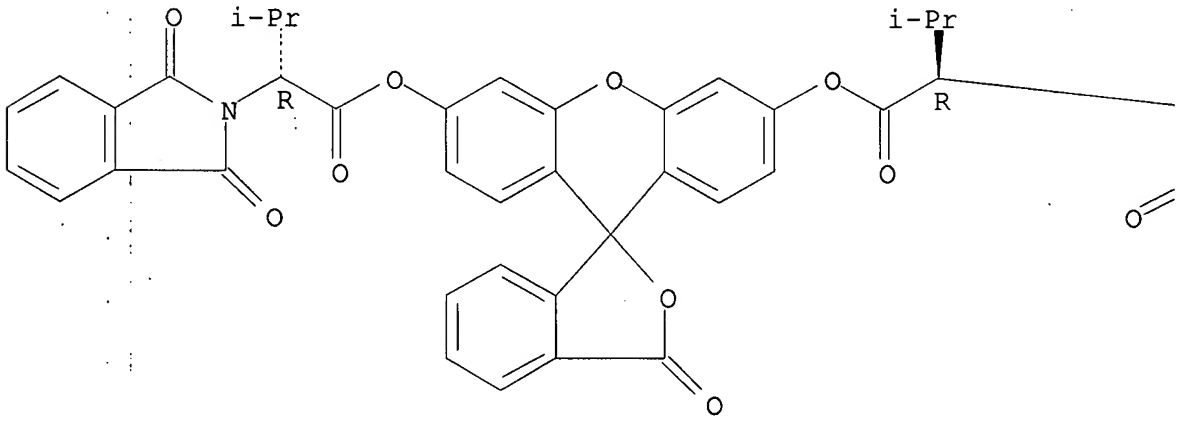
CN Octanoic acid,
1,1'-[3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl] ester (CA INDEX NAME)



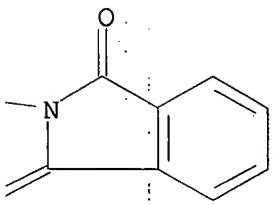
RN 36889-44-8 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-α-(1-methylethyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

PAGE 1-A



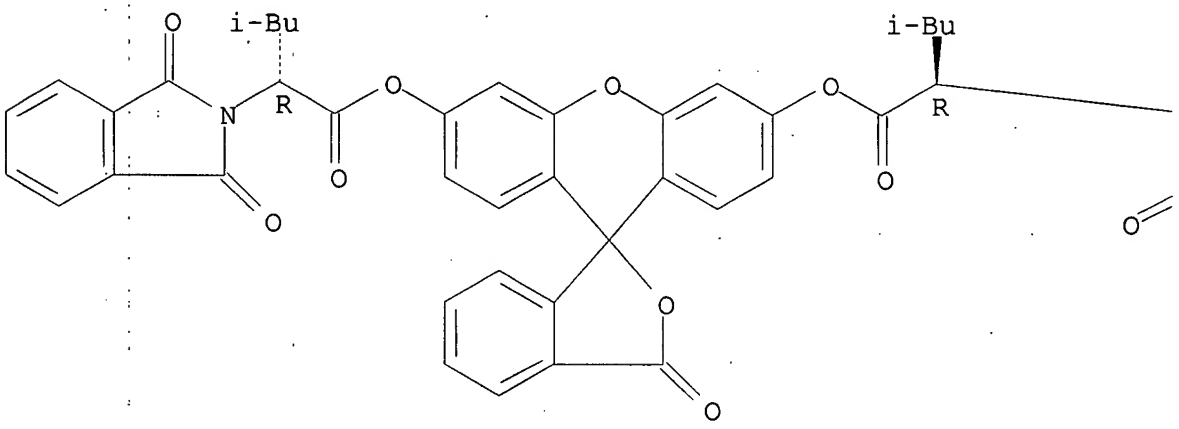
PAGE 1-B



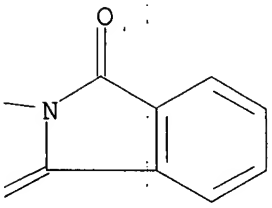
RN 36889-45-9 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-α-(2-methylpropyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



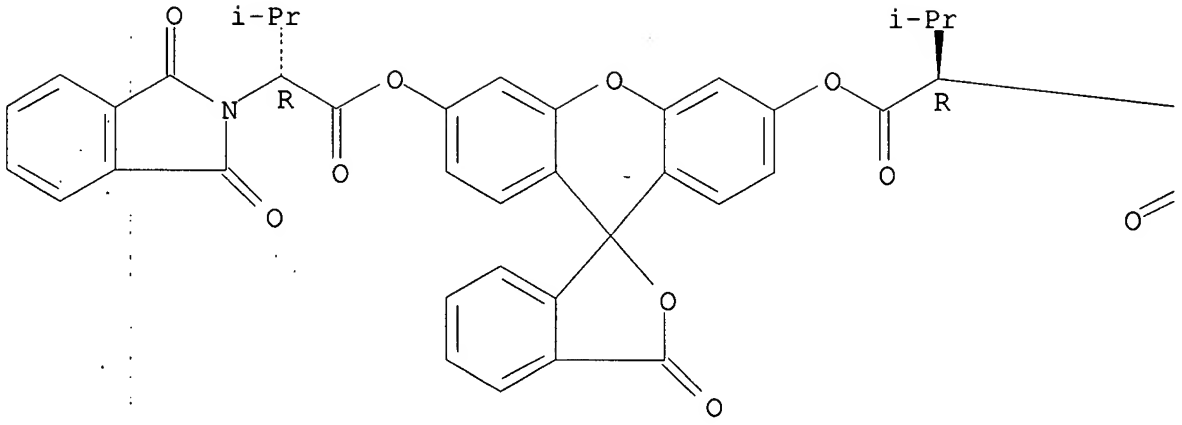
PAGE 1-B



RN 36889-46-0 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-α-(1-methylethyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



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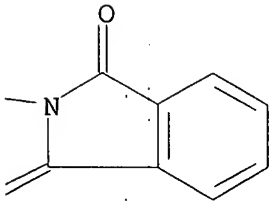
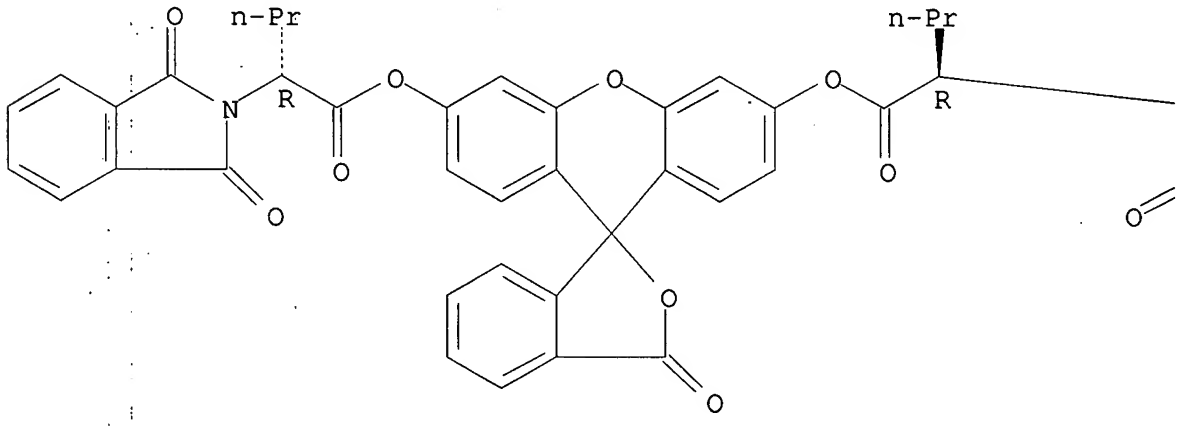


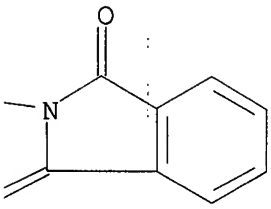
RN 36889-47-1 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-1,3-dioxo-α-propyl-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



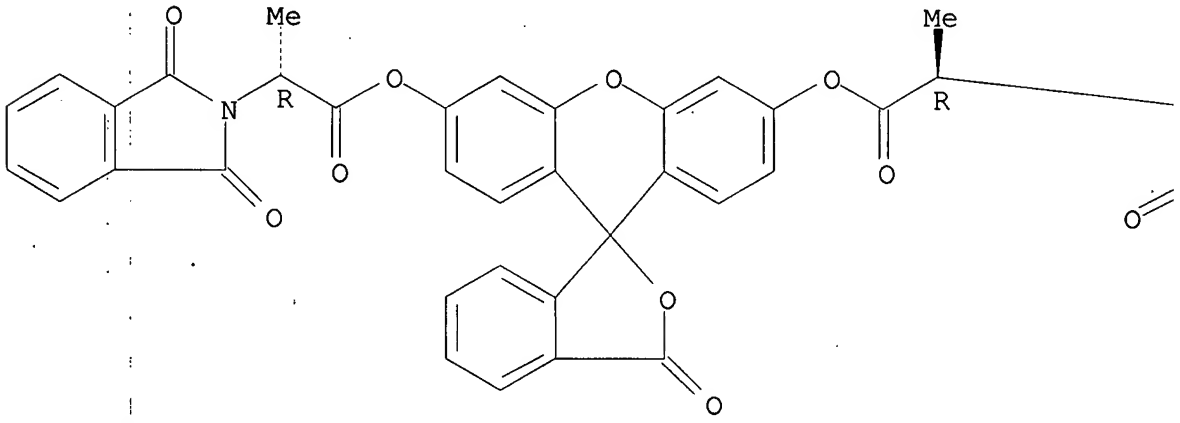
PAGE 1-B



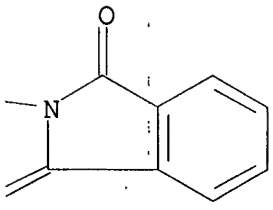
RN 36889-48-2 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-α-methyl-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



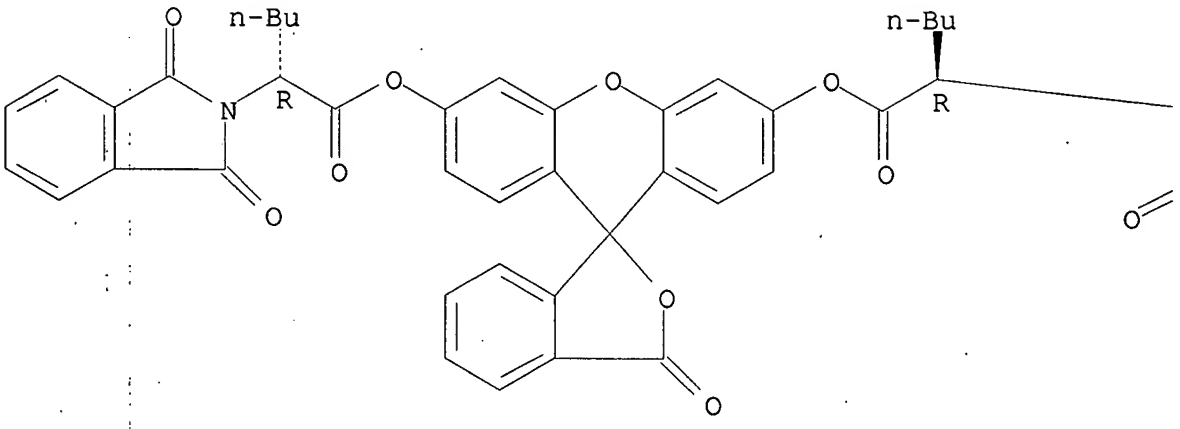
PAGE 1-B



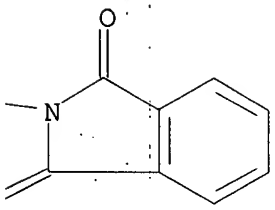
RN 36905-09-6 CAPLUS
CN 2H-Isoindole-2-acetic acid, α-butyl-1,3-dihydro-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



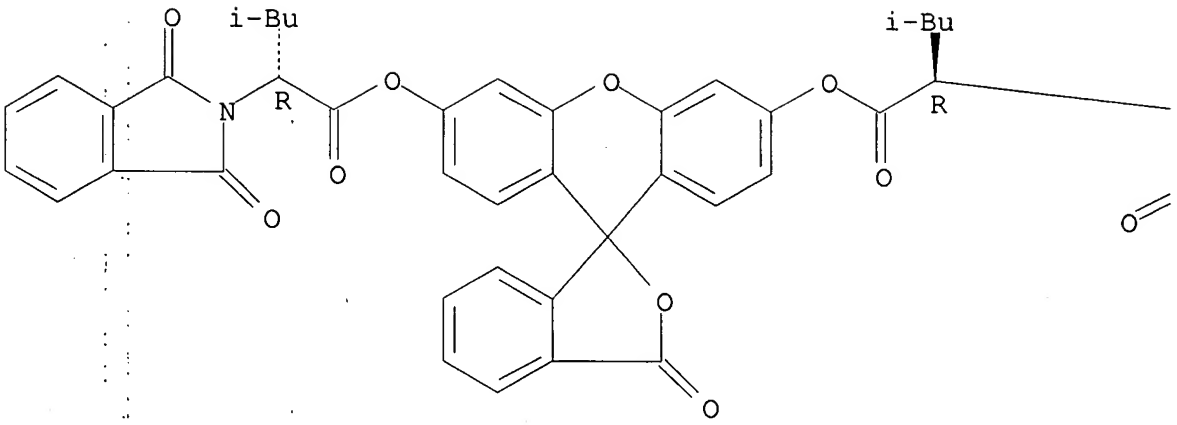
PAGE 1-B



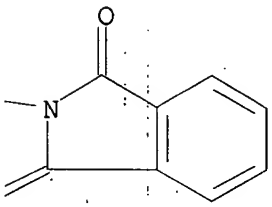
RN 36984-36-8 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-α-(2-methylpropyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B



L

L9 ANSWER 49 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1925:16971 CAPLUS
DOCUMENT NUMBER: 19:16971
ORIGINAL REFERENCE NO.: 19:2196i,2197a-g
TITLE: The condensation of resorcinols and a few other aromatic hydroxy compounds with some acids, esters, lactones and lactams
AUTHOR(S): Sen, R. N.; Sircar, S. S.
SOURCE: Quart. J. Indian Chem. Soc. (1924), 1, 151-72
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 18, 1831. hthalein-like compds. were obtained by heating 1 mol.
HO compound with 2 mols. acid or acid derivative and powdered ZnCl2 3 h. to
180-200° in a current of dry HCl. Rhodamies were prepared
at a lower temperature and without HCl. The product was freed from ZnCl2 by
extraction with HCl, dissolved in alkali and precipitated with dilute HCl or AcOH.

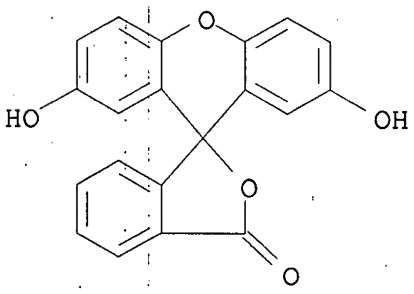
Bromination was carried out by allowing the alc. solution to stand overnight with a slight excess of Br. Esters react with phenols more readily than the free acids. It is remarkable that pyrogallol derivs. are not fluorescent in alkaline and organic solns., unlike the resorcinol derivs. In dibasic acids the 2 CO2H groups can react successively. Simultaneous reaction can be forced only by drastic means and with poor yields. Resorcinolgallein (80% yield), dark red, soluble in alkaline and organic solvents with green-red fluorescence, insol. in AcOH, ether and C6H6, dyes brownish shades on wool and silk, does not m. 250°. Di-Br derivative, red, non-fluorescent in alkali, dyes wool and silk deep red, does not m. 250°. Resorcinol-o-amino-benzein softens 1.75-7° and closely resembles the salicylein in color, fluorescence, solubility and dyeing properties. Yield 70%. Di-Br-derivative resembles the salicylein derivative, decomps. 195° and dyes red shades. K salt dissolves in water with green-red fluorescence changing to bluish red on standing. Resorcinolstearein softens 152°. The deep red color changes to a bluish tone on standing. The fluorescence is slight but appreciable, the affinity for wool and silk slight. Resorcinolpyromucein, insol. in C6H6 and ether, similar to the stearein in color and fluorescence, has more pronounced dyeing properties, does not m. 250°. Pyrogallolsalicylein, does not m. 250°; the deep red-brown alkaline and the organic solns. are non-fluorescent; it is soluble in acetone and a mixture of C6H6N and water. Anthranilorhodamine, pink powder, soluble in acids with green-red fluorescence, more marked in organic solns., dyes wool with a violet-greenish shade. and softens 230°. Yield 60%. Resorcinolsalicylein, does not m. 260°, and pyrogallolsalicylein were prepared in 85% yield from Me salicylate. β-Naphtholcoumarein a yellowish brown powder, soluble in NaOH, acetone, AcOH and concentrated H2SO4 with green fluorescence, softens 115° and is precipitated from alkaline solns. by CO2. The solubility in NaOH is due to the opening of the lactone ring, which is confirmed by anal. α-Naphtholcoumarein, a dark brown powder soluble in NaOH with red color and softening 117°, is obtained in 40% yield with considerable tarring. The slight fluorescence in NaOH is attributable to partial o-condensation to a fluoran like substance. Both compds. have a hardly appreciable affinity for animal fibers. Pyrogallolcoumarein, analogous to other pyrogallol derivs., does not m. 250°. Coumarinrhodamine dissolves in acids

with violet color and greenish fluorescence more marked in organic solvents, softens 156° and dyes wool and silk violet shades. Phenolresorcinolphthalein, prepared in 70% yield from phenolphthalein and resorcinol by heating 4.5 h. to 210-5°, while 3-4 h. heating to 180-200° yields fluorescein, orange powder, somewhat soluble in hot water, resembles fluorescein in alkaline solution, does not m. 250° and dyes a greenish yellow shade. The tetra-Br-derivative is an orange powder, soluble in alkali with some fluorescence, dyes in red shades and does not m. 250. The K2 salt was prepared The di-Bz-derivative m. 156 8°. Resorcinol-p-cresolphthalein, red, soluble in NaOH with green-red fluorescence less bright than that of fluorescein, softens 220° and is precipitated from alkaline solution by CO2. It forms a K2 salt. Resorcinolfluorescein, unlike fluorescein, insol. in Na2CO3, is soluble in NaOH with less bright fluorescence, than fluorescein, decomps. 230°. Resorcinolisatinein, orange, is soluble in alkali with slight fluorescence, more marked in concentrated H2SO4, dyes orange shades, and does not m. 265°. Yield 75%. Tetra-Br-derivative dyes red shades, decomps. 230°. Isatinrhodamine, soluble in acids with green-red fluorescence, dyes with an impure violet shade and softens 242°. Pyrogallolisati nein gives non-fluorescent, deeply colored solns. in alkali and organic solvents, does not m. 250°. Phenolisatinein, grayish powder, soluble in alkali with red color, softens 285°. p-Cresolisatinein anhydride, soluble in glacial AcOH and concentrated H2SO4 with slight fluorescence, does not m. 250°.

IT 596-04-3, Fluoran, 2,7-dihydroxy-
(constitution of)

RN 596-04-3 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',7'-dihydroxy- (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	294.83	467.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-38.22	-38.22

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